

REMARKS

This Amendment, submitted in reply to the Office Action dated March 18, 2010, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-19 are all the claims pending in the application. Claim 15 has been amended.

I. Rejection of claims 15-18 under 35 U.S.C. § 102

Claims 15-18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Coss et al. (Coss hereinafter) (US Patent No. 6,170,012 B1).

Claim 15

Claim 15 has been amended to recite “wherein the management module includes a configuration module which decides when to make modifications to a current configuration of a firewall.” Support for the amendment can be found at, for example, page 10, lines 17-35 and page 11, lines 24-35, of the Applicant’s originally filed specification. As discussed with the Examiner, the currently cited art does not teach or suggest that a management module includes a configuration module which decides when to make modifications to a current configuration of a firewall. Therefore, claim 15 and its dependent claim 16 should be deemed allowable.

Also, claim 15 recites, *inter alia*:

"a management module coupled to said network data processing module, said management module comprising a first memory containing a first table, said first table containing primary identifiers associated with at least one parameterized rule for providing direction to said network data processing module when one or more of said primary identifiers and said at least one parameterized rule are associated with at least one parameter value

The Examiner asserts that Fig. 3 and column 3, line 4 and lines 66-67 teaches the claimed first memory containing a first table. However, there is no teaching or suggestion of a management module coupled to the network data processing module (firewall as asserted by the Examiner) comprising the first memory containing a first table. Coss discloses that the security policies can be represented by sets of access rules which are represented in tabular form and which are loaded into the firewall by a firewall administrator.

Therefore, Coss does not teach or suggest the claimed management module coupled to the network data processing module.

In Response to Applicant's arguments, on page 2 of the Advisory Action, the Examiner asserts that the claimed management module is disclosed in column 3, lines 54-67 and column 4, line 1. As discussed above, the aspects of Coss cited by the Examiner describe that the security policies can be represented by sets of access rules which are represented in tabular form and which are loaded into the firewall by a firewall administrator. However, there is no teaching or suggestion of the claimed management module.

Further, the Examiner asserts that the firewall of Coss teaches the claimed network data processing module. See page 2 of Office Action. However, Applicant submits that Coss does not disclose the claimed management module coupled to the network data processing module. The Examiner asserts that the claimed management module is disclosed in cols. 3 and 4 and lines 66-67 and 1.

However, this aspect of Coss cited by the Examiner describes:

The security policies can be represented by sets of access rules which are represented in tabular form and which are loaded into the firewall by a firewall administrator. As illustrated in FIG. 3, such a table can provide for categories including rule number, designations of source and destination hosts, a designation of a special service which can be called for in a packet, and a specification of an action to be taken on a packet. Special services can include proxy services, network address translation, and encryption, for example.

However, this describes the security policies are loaded into a firewall (which the Examiner asserts teaches a network data processing module) by an administrator. Therefore, the firewall of Coss could not also teach the management module coupled to the network data processing module. Specifically, based on the Examiner's reasoning, the firewall would be coupled to itself, thereby evidencing the deficiency in the Examiner's rejection.

Claim 15 recites, *inter alia*, "wherein said at least one primary metarule is specified according to a string of characters containing a place-holder for each parameter of said primary metarule that is not statically defined, wherein the place-holder is relevant to the rule."

Coss only teaches the use of a “wild card” place-holder that represents “when a category provided for in the rule table is irrelevant in a certain rule.” Coss, col. 4, lines 15-21. In contrast, the place-holder “\$1” described in the Specification at p. 15, line 34 - p. 16, line 2, clearly represents the source or destination in the embodied rule prototypes, and the place-holder has definite relevance, as it corresponds to the ISP address of the e-mail server on the LAN.

In reply to Applicant’s arguments, on pages 15-16 of the Final Office Action, the Examiner cites col. 4, lines 15-21 in support of the Examiner’s rejection. However, as discussed above, this is explicitly contrary to the recitations of claim 1. Specifically, the wild card place holder of Coss applies when a category provided for in the rule table is irrelevant in a certain rule, whereas the claimed limitation recites that the place-holder is relevant to the rule.

Also, on page 16 of the Final Office Action and in the Advisory Action, the Examiner asserts that an embodiment of the invention discloses that the place-holder corresponds to an ISP address, and therefore, the Examiner interprets that place-holder as corresponding to the ISP address. Applicant notes that the Examiner should not unduly narrow the scope of the claims and the claims should be interpreted based on the actual claim language. Further, as the wild card “**” of Coss is provided for categories which are irrelevant to the rule, the DEST HOST of rule 20 as shown in Fig. 3 is irrelevant to rule 20. Consequently, the DEST HOST represented by an “**” in rule 20 is not relevant to the rule.

The Applicant thus submits that Coss fails to teach each and every element of claim 15, therefore, claim 15 and dependent claim 16 should be deemed allowable.

To the extent independent claims 17 and 18 recite similar subject matter, claims 17 and 18 should be deemed allowable for at least the same reasons.

Claim 16

Claim 16 recites “said management module further comprising a second memory containing a second table, said second table containing secondary identifiers associated with at least one of said primary identifiers and one or more respective parameter values.”

The Examiner asserts that Figs. 3 and 4 and column 5, lines 51-57 teaches the elements of claim 16. The aspects of Coss cited by the Examiner describe a rule table (Fig. 3) and a cache (Fig. 4). Further, Coss discloses that as the number of cache entries can grow to many times the number of rules, efficient use of a cache may require indexing.

However, contrary to the Examiner’s assertions, there is no teaching or suggestion of the claimed management module, or that the management module comprises a second memory containing a second table as claimed.

Therefore, claim 16 and should further be deemed allowable.

II. Rejection of claims 1-14 and 19 under 35 U.S.C. § 103

Claims 1-14, and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Coss et al. (Coss hereinafter) (US Patent No. 6,170,012 B1) in view of Bellinger et al. (Bellinger hereinafter) (US 2002/0169858).

To the extent independent claims 1 and 9 recite subject matter similar to independent claims 15, 17 and 18 as discussed above, Applicant submits that independent claims 1 and 9 and their dependent claims should be deemed allowable for at least the same reasons. Moreover, Bellinger does not cure the deficiencies of Coss.

Claim 1 recites “a first table storing sets of at least one primary rule, called “primary metarules,” in a parameterizable form and in corresponding relationship to primary identifiers.” See for example, page 16, lines 5-9 of the Applicant’s originally filed specification.

The Examiner asserts that column 4, lines 1-6 teaches this aspect of the claim. Coss discloses that security policy rules can be represented by sets of access rules which are represented in tabular form and are loaded into a firewall. The table can provide for categories including rule numbers, designations of source and destination hosts, a designation of a special service and a specification of an action to be taken on a packet.

However, Coss does not teach or suggest that the table stores sets of at least one primary rule, called “primary metarules,” in a parameterizable form and in corresponding relationship to primary identifiers, as claimed. Specifically, the rules of Coss do not appear to be in parameterizable form.

Claim 1 further recites:

“management means which is coupled to control means of said data processing server and, on receipt of auxiliary data representing operating parameters that request reconfiguration of the control means, the auxiliary data delivered by said control means after reception by the data processing server of secondary data that requires reconfiguration of the control means, selects at least one

of the primary identifiers in the first table and associates said auxiliary data therewith so as to define dedicated processes of said control means"

The Examiner asserts that column 4, lines 3-6 and column 5, lines 35-46 teach this aspect of the claim. Coss discloses a table can provide for categories including rule numbers, designations of source and destination hosts, a designation of a special service and a specification of an action to be taken on a packet. Further, Coss discloses that stateful packet filtering may be implemented by caching rule processing results. However, Coss does not teach at least the interrelationship between the management means, controls means, data processing server, auxiliary data and secondary data, as claimed.

The Examiner states that Coss does not disclose "on receipt of auxiliary data representing operating parameters that request reconfiguration of the control means." and cites Bellinger, paragraph [0077], to cure the deficiency.

However, Bellinger does not cure the deficiencies of Coss disclosed above. Further, Bellinger discloses:

Each service request, for both registration and activation, is sent via XML from the Service Provider's portal server to the central controller. The controller interprets the request by passing the service parameters through the pre-defined rules associated with the Service Offering and stored in the LDAP directory. These rules could be as simple as sending a configuration request to a Firewall to allow or deny access to specific ports, or it could be more complex as in the case of an Application Service where the central authority may have to pass access information to the application server, set up a VPN between

the user and application server, punch through a firewall and modify the available bandwidth and QoS to the user.

However, contrary to the Examiner's assertions, there is no teaching or suggestion that on receipt of auxiliary data representing operating parameters that request reconfiguration of the control means, as claimed.

For at least the above reasons, claim 1 and its dependent claims should be deemed allowable.

To the extent independent claim 9 recite similar subject matter, independent claim 9 and its dependent claims should be deemed allowable for at least the same reasons.

Claim 19

Claim 19 recites, *inter alia*, "wherein the primary metarule comprises one of definitions and prototypes of sets of the least one primary rule." Applicant refers the Examiner to, for example, page 11, lines 5-25 of the specification for further clarification.

Applicant submits that the art cited by the Examiner does not teach this aspect of the claim. Therefore, claim 19 should be deemed allowable.

III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

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Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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